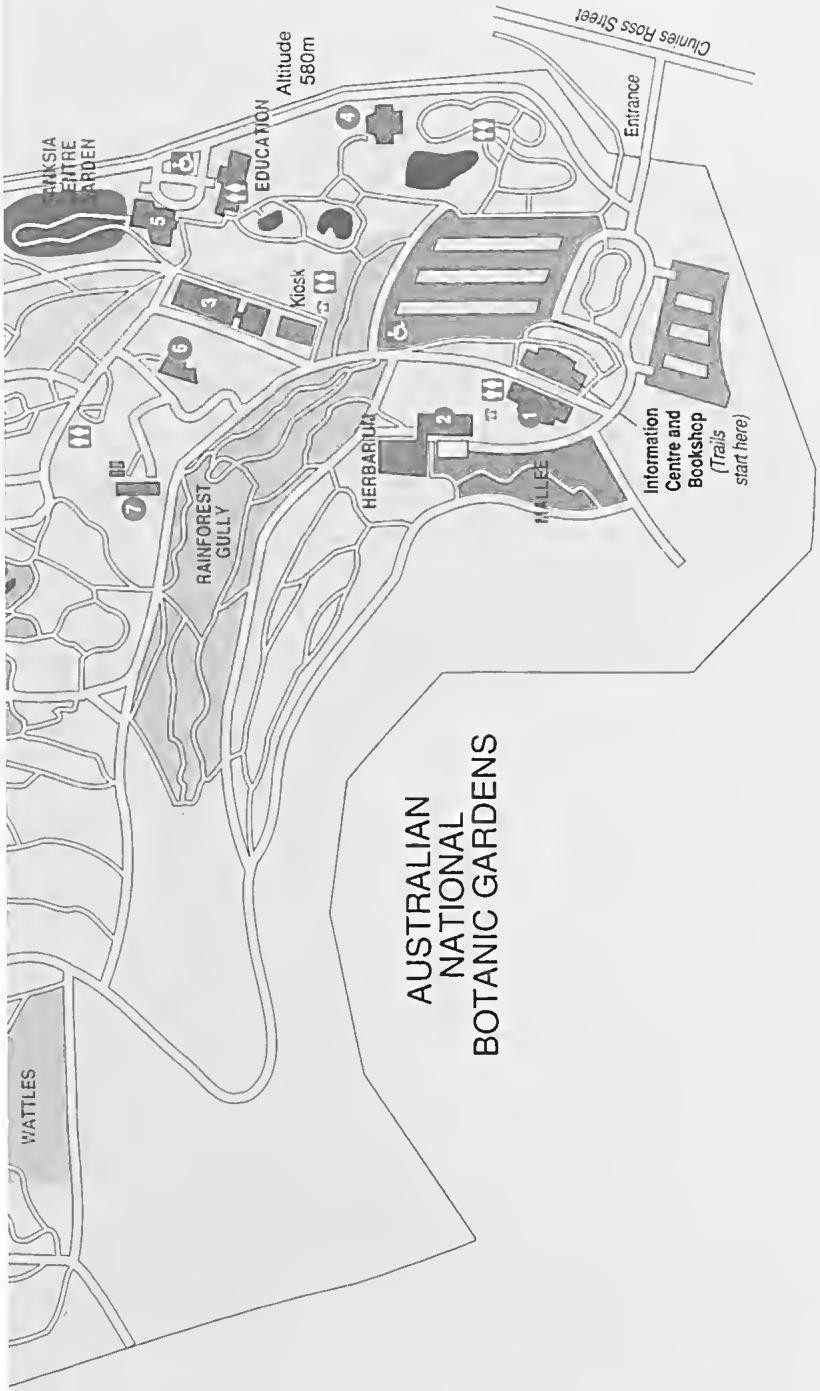
A guide to the

Australian National Botanic Gardens

Australian National Parks and Wildlife Service



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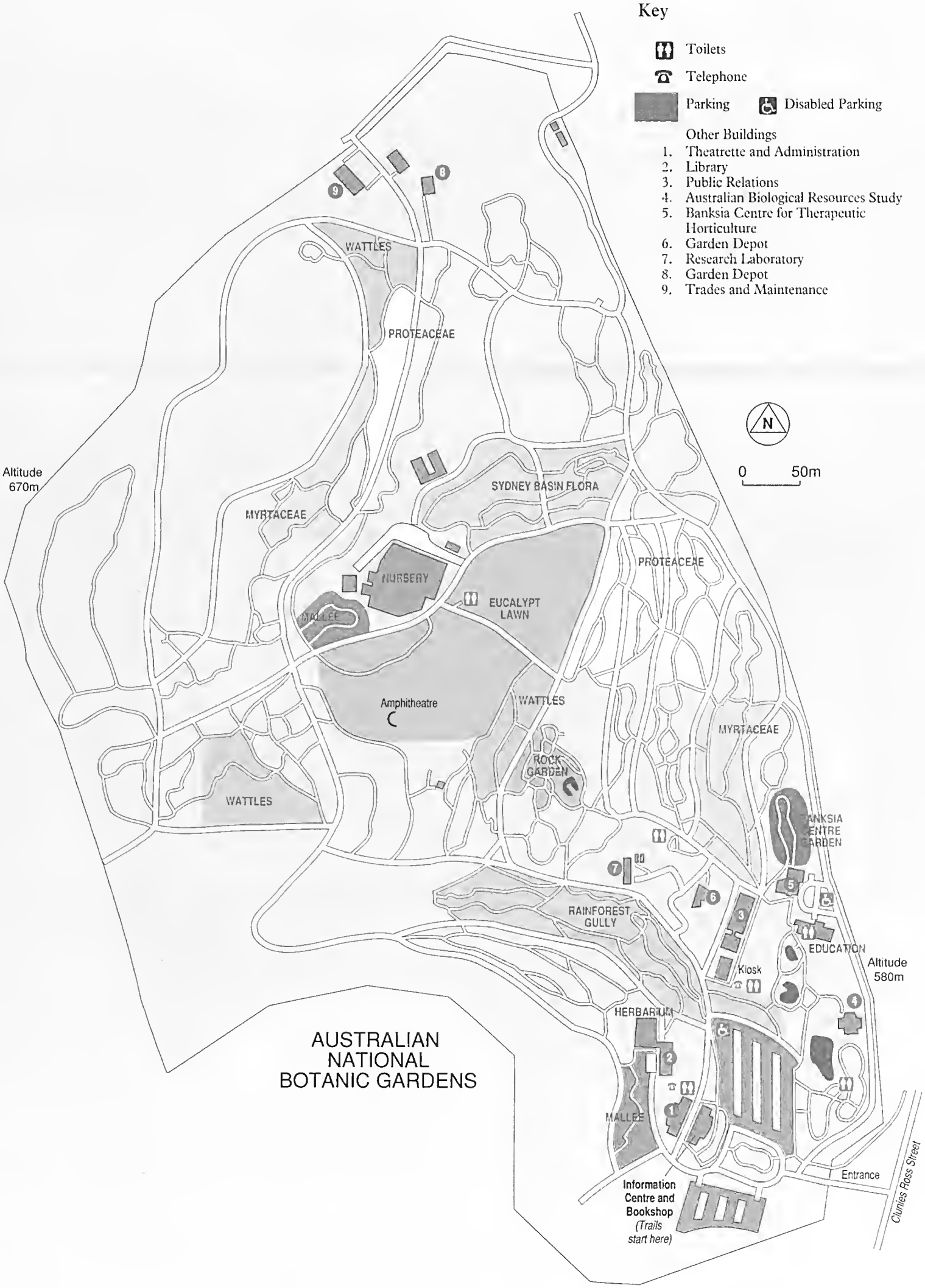
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AUSTRALIAN NATIONAL BOTANIC GARDENS

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A gnarled Brittle Gum, *Eucalyptus mannifera* supspecies *mannifera*, at the Gardens in Canberra.
Photo: ANBG Collection

Australian National Botanic Gardens

The Nation's Garden

Almost one third of Australia's ferns, conifers and flowering plants are grown at the Gardens.

Elkhorn fern, *Platycerium bifurcatum.*
Photo: R. Hotchkiss, ANBG Collection

Black Cypress Pine, *Callitris endlicheri.*
Photo: R. Hotchkiss, ANBG Collection

The Australian National Botanic Gardens in Canberra and at Jervis Bay are unique places where people from around the world can experience the great diversity, colour and often spectacular beauty of Australian native plants.

The *Encyclopaedia Britannica* defines a botanic gardens as:

> *A site primarily intended for the study and scientific cultivation of plants. Botanical gardens also educate the public through displays and publications. They maintain herbariums (collections of preserved plant specimens) and botanical libraries, provide grounds for public enjoyment, and aid in plant conservation.*

In all these respects the Australian National Botanic Gardens endeavours to achieve the highest standards and the Gardens is truly an international resource for all interested in Australian plants.

Visitors who eome to enjoy and learn among the abundant plantings and pleasant walks of the Gardens have around them the largest eolleetion of living Australian plants anywhere in the world. More than 5500 speeies are now in eultivation. They represent about one third of all known Australian flowering plants, eonifers and ferns.

Australia is a vast eountry and the native flora is widely dispersed. It would be virtually impossible for the seholar or interested lay person to see most native plants in their natural habitat. For that reason, the goal of the Australian National Botanie Gardens was elear from the beginning – to bring together in one plaee a representative eolleetion of living and herbarium (preserved) speeimens of Australian and related plants.

The eolleetion is used for researeh, edueation and publie enjoyment. In addition, the identifieation, eultivation and study of endangered speeies play an ever-more important part in the Gardens' programs.

The Gardens are young eompared to the world's long-established botanie gardens. This makes the hortieultural and botanie aehievements all the more impressive. Few who stroll past the profusion of mature plantings, marvel at the towering trees alive with birds, or immerse themselves in the eool beauty of the Rainforest Gully, stop to reeall that less than 50 years ago both sites were eleared eattle farms on some of Australia's least fertile soils.

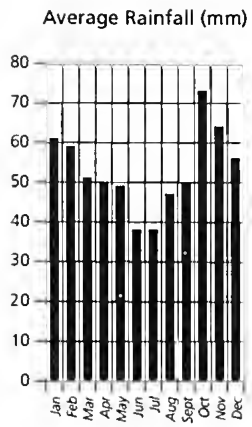
The Gardens today are the result of a skillful mateh between: speeimens, euttings and seeds eolleeted from the wild; seientifie researeh and plant elassifieation; advaneed teehniques for propagation of living plants; and, identifieation and labelling using the extensive reference eolleetion established in the herbarium.

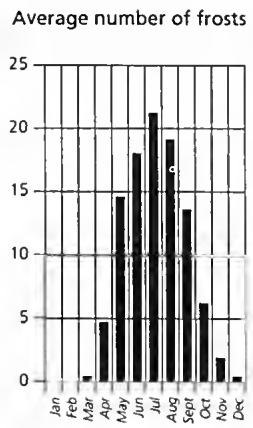
Along the way, the professionals who have guided the Gardens' development didn't forget the speeial reereational and edueational features that help make the Gardens sueh a popular plaee to visit for a luneh hour or a day.

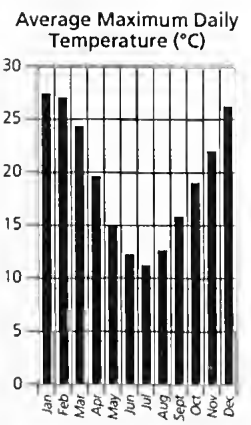
Grevillea angulata.
Photo: R. Hotchkiss, ANBG Collection

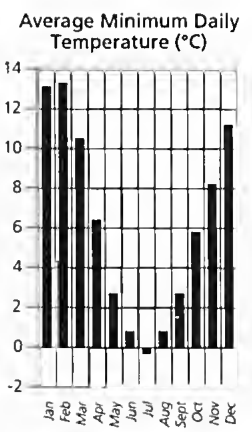
The Gardens at a Glance

	Canberra	Jervis Bay
Total area	90 heetares	80 heetares
Developed area	40 heetares	20 heetares
Altitude	571-677 metres	26 metres
Rainfall	664 mm	1170 mm
Soils	elay loam, elay	sand
Wettest month	Oetober	May
Driest month	June/July	Oetober
Winter frosts	yes	no
First Planting	1949	1951
Offieially opened	1970	
Visitors (1991)	376 000	43 000
Living eolleetion	5500 speeies	1400 speeies
Herbarium	210 000 speeimens	









A Short History

Establishing the national botanic gardens in Canberra required a leap of faith and a lot of hard work on the part of many people. The chosen site on the eastern slopes of Black Mountain had been largely cleared and was in use as a dairy farm in 1935, when a scientific report by Dr Bertram Dickson of the Council for Scientific and Industrial Research recommended that a botanic gardens be established.

The biggest challenge was Canberra's location and climate. The cold winters, featuring frosts that sometimes linger all day on southern slopes, are followed by hot dry summers marked by frequent strong winds. Infertile soils completed the daunting raw material that faced Canberra's Superintendent of Parks and Gardens, Dr Lindsay Pryor, in 1944.

A report on 13 September 1949 in the *Canberra Times* 'First Tree Planting in Botanical Garden Area.' heralded the beginning of the Gardens. Planting continued slowly during the 1950s and was accelerated during the 1960s. By 1970 there were about 2000 species in the living collection, work had begun on the Rainforest Gully and the herbarium had gathered 18 000 specimens.

The scientific and educational resources of the Gardens were greatly expanded during the 1960s with development of the herbarium and library in 1966, nursery and glasshouses in 1967 and the research laboratory in 1970.

FIRST TREE PLANTING IN BOTANICAL GARDEN AREA

The first tree planting in the botanical gardens area of Canberra was performed by the Prime Minister (Mr. Chifley) in the presence of delegates to the British Commonwealth Specialist Conference in Agriculture.

Mr. Chifley planted a small gum tree and Sir Edward Salisbury, Director of the Royal Botanical Gardens at Kew London, and chairman of the conference, planted a small oak tree.

Six hundred acres on the south-eastern slopes of Black Mountain and bounded by the C.S.I.R. and the National University have been set aside for the botanical gardens.

Planting the first tree at the Gardens, September, 1949. Prime Minister Ben Chifley and the Director of the Royal Botanic Gardens, Sir Edward Salisbury stand beside a Brittle Gum, *Eucalyptus mannifera*. The tree can be seen near the Gardens' front gates.
Photo: CSIRO

The Canberra Times announces the first tree planting at the Gardens.

In 1951 a frost-free Annexe site was selected at Jervis Bay to extend the range of species that the Gardens could cultivate. A cattle grazing operation, Bherrwerre Farm, had been operating since the turn of the century at the heart of the site next to Lake McKenzie, a natural dam formed by sand dunes. Four hundred trees were immediately planted to mark the addition of the Annexe to the Gardens.

Public access to the Canberra Gardens started in 1967. On 20 October 1970 Prime Minister John Gorton officially declared the Gardens open.

The Gardens' extensive photographic collection was established in the late 1960s. It now houses some 20 000 images featuring the development of the Gardens, records of field trips, and a large collection of plant portraits.

The 1960s also saw the beginning of the public information, interpretation and education services. By 1991 the Gardens had become an outdoor learning centre for close to 10 000 students each year. The Gardens now caters for a wide range of community interests from people with disabilities to the home gardener in search of information and ideas about native plants.

The value of the Gardens to the whole country was officially recognised in 1978 with a name change to the National Botanic Gardens and a further change in 1984 to the Australian National Botanic Gardens. The Gardens' value to the nation was further recognised when it was placed on the Register of the National Estate in 1990.

Cattle once grazed the site of the Jervis Bay Botanic Gardens. Bherrewerre farm was established around the turn of the century.
Photo: ANBG Collection

The Rainforest Gully in 1968. The installation of a misting system in the Gully during this year helped transform it into a cool and lush display – one of the Gardens' major attractions.
Photo: ANBG Collection

The Plant Displays

Planting Themes

In addition to decorative plantings, most plant displays are organised into taxonomic or ecological themes.

Taxonomic Displays

These displays feature closely related plants. Family displays include the Myrtaceae. This family includes the genus *Eucalyptus*, which has hundreds of species, and other genera such as *Callistemon* (bottlebrush) and *Melaleuca* (paperbark and honey myrtle). Other taxonomic plantings focus on the range of plants within one genus of a plant family. The *Acacia* (wattle) sections feature some of the 1000 species within this genus. Acacias are part of the family Mimosaceae.

Taxonomic displays, such as the wattle sections (*Acacia* species), feature plants which are botanically related. (Inset) Mount Morgan Wattle, *Acacia podalyriifolia*, flowers in early winter.
Photos: ANBG Collection

Ecological Displays

Thes displays feature plants that grow together in similar environments. Examples are the plants in the Rainforest Gully, in different parts of the Rock Garden, in the Sydney Basin Flora section and in the Mallee Shrublands section.

Ecological displays such as the Mallee Shrublands section feature plants which grow in similar environments.
Photo: M. Fagg, ANBG Collection

The Canberra Gardens

The Gippsland Water Dragon, *Physignathus lesueurii howittii*, thrives among the Gardens' pools and in the lower sections of the Rainforest Gully. They are often seen sunning themselves on rocks.

Photo: R.W.G. Jenkins, Wildscene Photographics

Plants from the rainforests of eastern Australia flourish in the moist, shady environment of the Rainforest Gully.

Photo: M. Fagg, ANBG Collection

The Rainforest Gully

It is difficult to imagine that this site was a natural dry gully supporting eucalypts, shrubs and grasses until the late 1960s. Since then, a lush rainforest has been coaxed into life with the aid of some 2000 fine misting sprays which supply extra water and keep the humidity high.

Strategic planting of fast-growing wattles and some eucalypts associated with rainforest areas have added shelter from Canberra's frosts and cold winter nights.

The Rainforest Gully plantings represent areas along Australia's eastern coast and are arranged in roughly south to north

A new frond of the Soft Tree-fern, *Dicksonia antarctica*.
Photo: R Hotchkiss, ANBG Collection

Exploring the Rainforest Gully.
Photo: Save the Bush Program

Pinkwood, *Eucryphia moorei*, is a tree associated with rainforests in southern New South Wales and eastern Victoria.
Photo: ANBG Collection

order. Tasmanian rainforest plants are grouped at the end of the Gully nearest the Kiosk. Perimeter paths and a boardwalk in the floor of the Gully guide visitors on a northerly journey until they reach plantings from northern Queensland at the upper end of the Gully.

Seeds and cuttings for the Rainforest Gully were collected from the wild. Most have come from the coldest part of their range, giving them a better chance of surviving in Canberra. Some palms and other species from northern Queensland are kept in the nursery glasshouses during winter and are brought out in the warmer months for display.

Australian rainforests still hold genetic links to the continent's ancient past. Hundreds of millions of years ago Australia was part of a super continent, Gondwana, and was joined to southern Africa, India, South America and Antarctica. The southern beeches, *Nothofagus* species and the conifers, *Araucaria* species which grow in Australian rainforests were part of the flora of this ancient continent.

A range of soil mixes in the Rock Garden allow the cultivation of many plants which need special growing conditions. The Rock Garden is an ideal place to display small plants.
Photo: M. Fagg, ANBG Collection

The Superb Fairy-wren, *Malurus cyaneus*, is common around the Gardens. The dense shrub cover of many of the garden beds provides excellent shelter and nesting sites. The diversity of native plants and insects and the range of habitats in the Gardens supports a great variety of birds.
Photo: G. B. Baker, Wildlife Photography

The Rock Garden

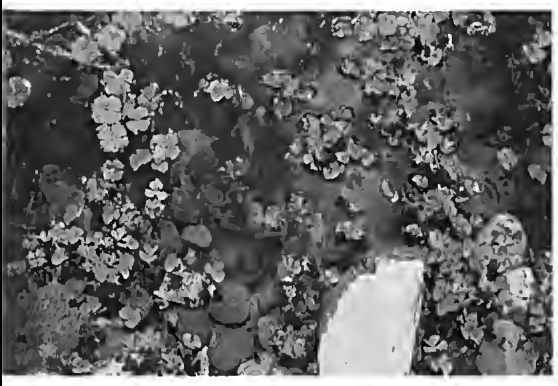
The Rock Garden has been designed to cater for desert, alpine and small Australian plants which have special cultivation needs.

The soils consist of special mixes of composted pine bark (which has similar properities to peat) and sand. Limestone has also been added to some beds. Pockets of raised soil provide the necessary drainage. Larger rock masses store heat from the sun, which is slowly released at night, providing a more temperate environment for those plants that need it.

Top left
The Garland Lily, *Calostemma purpureum*, flowers over the summer months and dies back during the winter.
Photo: M. Fagg, ANBG Collection

Top right
The graceful flowers of the Native Fuchsia, *Epacris longiflora*.
Photo: R. Hotchkiss, ANBG Collection

Bottom right
The flowers of *Pelargonium rodneyanum* add colour to the Rock Garden during spring and summer.
Photo: M. Fagg, ANBG Collection



A watercourse provides additional ecological niches through the Rock Garden. A dry creek bed in the arid zone becomes a damp soak. The water then gathers force, becoming a creek leading to a dripping rock shelf, waterfall and pool. Plants associated with these special environments are grown nearby.

Bottom left
Nardoo, *Marsilea drummondii*, is a fern which grows in water and on the edges of ponds.
Photo: M. Fagg, ANBG Collection

Here as elsewhere, the Gardens' horticultural staff monitor and fine tune the growing conditions for the various plantings. There are always problems to solve. Many plants have never before been grown in a botanical collection.

The spectacular flowers of the Red Flowering Gum, *Eucalyptus ficifolia*.
Photo: R.Hotchkiss, ANBG Collection

The Eucalypt Lawn

Just as gum trees are central to most peoples' image of the bush, so the Eucalypt Lawn dominates the geographic centre of the Gardens. There are over 700 known species of *Eucalyptus*. Examples of 100 species tower over the lush grassy areas where relaxing and learning offer twin attractions.

More recent additions to the Gardens are the mallee eucalypts from central and western Australia which have been planted in a special section next to the Lawn.

The Eucalypt Lawn and the neighbouring Burbidge Memorial Amphitheatre provide popular venues for community events, such as concerts, as well as for picnics and weddings.

Over 100 *Eucalyptus* species tower over the Eucalypt Lawn.

The Nancy Burbidge Memorial Amphitheatre commemorates the contribution to Australian botany of Dr N. T. Burbidge (1912 - 1977)
Photo: ANBG Collection

A model Cockatoo made by school children adds interest to the Mallee Shrublands Section during an educational visit to the Gardens.
Photo. R. Hotchkiss, ANBG Collection

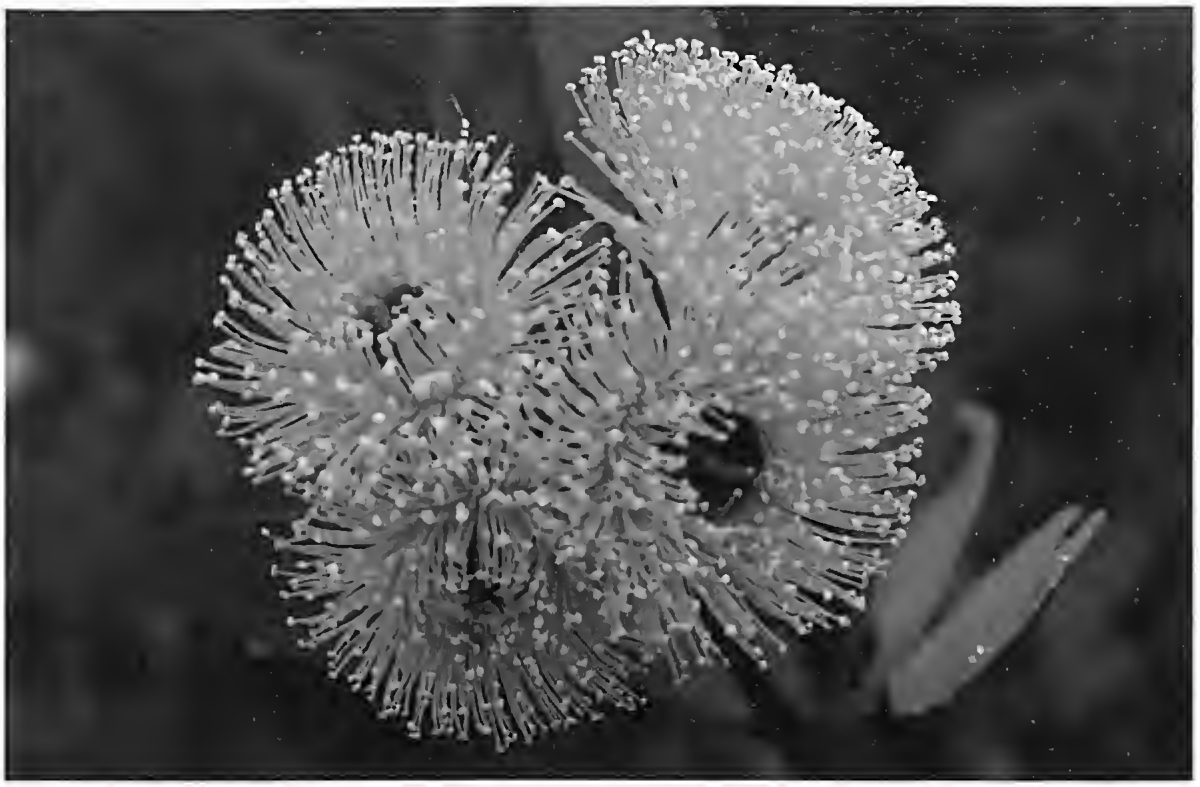
Mallee Shrublands

An important educational goal of the Gardens is to help Australians learn more about local ecosystems. Despite greater public appreciation of the unique Australian flora, a lot is still being dismissed as 'scrub' of little value.

Such has been the fate of the mallee country of the semi-arid south. Extensive clearing of shrublands for farming has resulted in some mallee ecosystems and the animals that live there, such as the Malleefowl, *Leipoa ocellata*, becoming rare.

Mallee is an aboriginal name for multi-stemmed species of *Eucalyptus*. They are adapted to a climate featuring short winters, with an unreliable wet season, and long, hot dry summers. Mallee trees are distinguished by large woody rootstocks (lignotubers) which regenerate quickly after fire.

The flowers of *Leptosema daviesioides* form near the ground to allow pollination by small marsupials.
Photo: M. Crisp, ANBG Collection



While a sea of mallee shrubland may look monotonous to the casual eye, it is in fact a dynamic ecosystem with varied understorey plants and spring-flowering annuals.

The Gardens have established groups of shrubland plantings representing mallee from Western through South Australia into Victoria. Special mixes of soil and good drainage offer the plants the best growing conditions.

Mallee eucalypts, such as the Bell-fruited Mallee, *Eucalyptus preissiana*, often have spectacular flowers.
Photo: R. Jackson, ANBG Collection

The Mountain Devil, *Lambertia formosa*. Its fruits resemble the horned head of a devil and are a favourite of children visiting the Gardens.
Photo: M. Fagg, ANBG Collection

Left
Tall flower spikes of the Gymea Lily, *Doryanthes excelsa*, attract many nectar-feeding birds.
Photo: R. Hotchkiss, ANBG Collection

Right
The River Rose, *Bauera rubioides*, bears flowers for most of the year.
Photo: M. Fagg, ANBG Collection

A Waratah, *Telopea speciosissima*, flowers along one of the paths of the Sydney Basin Flora Section.
Photo: R. Hotchkiss, ANBG Collection

Sydney Basin Flora Section

The sandstone dominated Sydney Basin extends from Nowra, on the New South Wales south coast, to the Blue Mountains north-west of Sydney. This area supports one of the most rich and diverse floras of the world.

The Sydney Basin Flora section is still under development, however, many species, including the Gymea Lily, *Doryanthes excelsa* and Willow-leafed Crowea, *Crowea saligna*, have already been established.

The Button Wrinklewort, *Rutidosis leptorrhychoides*, was once widespread in Victoria and in the Canberra region. Clearing for pasture land and competition from weeds now threaten its existence.
Photo: M. Fagg, ANBG Collection

Endangered Species

Botanie Gardens throughout the world have an important role to play in the eonservation of endangered speeies. The Australian National Botanie Gardens has taken a leading role in preserving endangered native plants by learning about their propagation and eultivation.

The ultimate goal of endangered speeies eonservation is to eonserve the speeies in the wild. Through its sueeessful propagation work, the Gardens provides other ageneies with the material and expertise to assist in the possible re-introdution of endangered speeies into the wild.

A reeent Australia-wide study has elassed 200 plants as 'endangered' (in imminent danger of extinetion). Close to half of these have been brought into eultivation at the Gardens in Canberra and Jervis Bay.

Together with other eonservation ageneies, the Gardens is also eo-ordinating a national information network on endangered plants and on locations where they are being eultivated.

Pink Pimelea – at Risk!

The Pink Pimelea, *Pimela spicata*, is an unassuming native of coastal headlands in northern NSW and of the Cumberland Plain in Western Sydney.

The small spreading plant with its tiny white or pink flowers is now found in only a few remaining locations in NSW. Its habitat has been destroyed elsewhere by road building, housing developments and other human activities.

Pink Pimelea is now sueeessfully in eultivation at the Gardens and is used as part of an edueation program on endangered speeies.

Collecting *Swainsona recta* as part of the Garden's concern for this threatened speeies.

Photo: Peter Ollerenshaw, ANBG Collection

The Jervis Bay Gardens

Spring is one of the best times to visit the Jervis Bay Botanic Gardens where cultivated plantings flourish side by side with naturally-occurring bush and heathland. The aptly named Christmas Bush, *Ceratopetalum gummiferum*, and Pink Swamp heath, *Sprengelia incarnata*, are among the local plants that flower in spring and early summer.

Jervis Bay is also the place to see frost-sensitive plants which cannot be cultivated in the open at Canberra. Vireya rhododendrons from Papua New Guinea, collected as part of the Gardens' interest in plants related to the Australian flora, are also cultivated. A range of rainforest species thrive in the Gardens' Rainforest Gully. Palms and ferns are a particular feature here.

Notable also is the abundance of native orchids. They are of several types: ground orchids (terrestrial) and those that grow on other surfaces such as rocks (lithophytic) and on other plants (epiphytic).

The Rainforest Gully at the Jervis Bay Botanic Gardens.
Photo: R. Steininger, ANBG Collection

(Inset) Hollows in the tree trunks around the bushland parts of the Gardens provide excellent shelter for the Sugar Glider, *Petaurus breviceps*. These small mammals glide from tree to tree in search of sugary sap. The scratches made by Sugar Gliders can be seen on the trunks of some trees.
Photo: G. B. Baker, Wildlife Photography

Lake Mc Kenzie from the Lake Trail.
Photo: ANBG Collection

Sandstone outcrops throughout the Gardens support a fascinating variety of lichens, mosses, ferns and orchids.
Photo: R. Hotchkiss, ANBG Collection

Some, such as the Rock Orchid, *Dendobrium speciosum*, occur naturally here. They are easily spotted on sandstone outcrops, often next to mosses and lichens. The range of naturally-occurring mosses, lichens and liverworts is itself a special part of the Jervis Bay Botanic Gardens.

The central feature of the Annexe is Lake McKenzie, a natural lake formed by rising sand dunes. The lake provides much of the water for the Gardens and attracts a variety of birds, mammals and even tortoises. The water is very dark, stained by centuries of accumulated tannin from decaying vegetation. Light cannot penetrate far below the surface so the lake is very cold and does not support fish life.

Walking trails wind through naturally-occurring heath and woodland both south and east of the Lake. Ground orchids, grass trees, banksias, hakeas and coastal eucalypts are interesting features along the way.

Natural heathland is a mass of colour in spring – and a special feature of the Jervis Bay Botanic Gardens.
Photo: M. Fagg, ANBG Collection

The Rock Orchid, *Dendrobium speciosum*, is one of a number of orchids which grow naturally, or are cultivated, at the Gardens.
Photo: R. Hotchkiss, ANBG Collection

Grass trees, *Xanthorrhoea* species, are common along the Nature Trail.
Photo: R. Steininger, ANBG Collection

Grassed areas, as well as a pienie shelter overlooking the lake, eneourage visitors to relax and stay longer. Those who do are likely to find rosellas inviting themselves to luneh and kookaburras swooping down for inseets or laughing in a tree not far away.

Behind the Scenes

On most collecting trips, cuttings or seeds are collected to grow plants for the Gardens, while a matching flowering specimen is collected to be preserved in the Herbarium.

Oxylobium ellipticum growing at the Gardens.
Photo: R. Hotchkiss, ANBG Collection.

The Herbarium

Some 210 000 pressed, dried plant specimens housed in the Gardens' herbarium provide a vital research and reference collection. Staff use herbarium specimens to accurately identify and label the living plants in the Gardens. Numbers on the plant labels link each living plant to an herbarium specimen.

There are 140 000 herbarium specimens of flowering plants and ferns and about 70 000 of the less-well studied mosses, lichens and liverworts (cryptogams). The collection of cryptogams is the second largest in the southern hemisphere and is the core of the Gardens' research program into these plants.

A herbarium specimen of *Oxylobium ellipticum*.
Photo: M. Fagg, ANBG Collection

Each species is represented by a set of specimens collected from different locations. Over time, these provide a more complete picture of the species' geographical range, ecology and degree of variation.

Properly-prepared herbarium speeimens in a elimate-controlled environment ean remain in good eondition for over 500 years.

Top left
Herbarium speeimens are stored in movable units in a elimate controlled environment.
Photo: ANBG Collection

Preparing a typieal herbarium speeimen starts with a field trip. A suitable flowering and fruiting seetion of plant is seleeted and pressed between sheets of absorbent paper. The researeher takes extensive notes on the habitat of the plant. On most trips euttings or seeds of the same plant from whieh herbarium speeimens are taken are colleeted for the living colleetion.

After further drying and mounting on aeid-free paper the speeimen is labelled with its seientifie name and deatils of the site from whieh is was colleeted. It is then filed in the herbarium's speeialised storage vaults, for use by the seientifie eommunity.

Top right
Flowering speeimens are colleeted on field trips to be preserved in the Gardens' Herbarium.
Photo: I. Telford, ANBG Collection

The Herbarium is opened to the publie during special events.
Photo: R. Hotehkiss, ANBG Collection

Detailed information about the names and origins of living plants and herbarium specimens are stored on a specially designed computer database.
Photo: R. Hotchkiss, ANBG Collection

Research into the classification and biology of Australian and related plants is an important part of the work of the Gardens. Orchids are a special research interest.
Photo: R. Hotchkiss, ANBG Collection

Computer Records

Detailed records of herbarium specimens, living plants and photographs are stored on a computer database. The database is known as the Integrated Botanical Information System (IBIS). Its design helps link information about the herbarium collection, the living collection and the photographic collection. This avoids duplication of record keeping and provides an enormous amount of information to people using any of the Gardens' collections.

Botanical Research

Research at the Gardens is concerned with the classification and biology of Australian and related plants. The living and herbarium collections also provide research opportunities for Australian and overseas scientists interested in the diversity of plant life.

Scientists at the Gardens have several main research interests. These include orchids (family *Orchidaceae*), and cryptogams (mosses, lichens and liverworts), particularly, the moss family Meteoriaceae.

One aspect of research into orchids has concentrated on developing techniques for growing ground-dwelling (terrestrial) orchids from seed. This is closely linked to conservation efforts. The Gardens' scientists have succeeded in unravelling a complex relationship between the orchids and fungi that help the orchid seeds to germinate. As a result of this research, terrestrial orchids are successfully being grown 'in captivity' for the first time, an achievement of international significance.

The Gardens' scientists and other professional staff regularly contribute to national and international forums at the forefront of botanic and horticultural knowledge and education. They also provide technical assistance to other botanic gardens and conservation organisations.

The Library

The Gardens' specialist Library supports requests from staff and visitors. The collection includes books, maps, reprints, journals and certain rare books and art works on botanic and horticultural themes.

Most of the plants for the Gardens are propagated at the Nursery. They are planted in the open in Spring and Autumn.
Photo: R. Hotchkiss, ANBG Collection

Re-potting cuttings in the Gardens' Nursery. Many of the species propagated have not been successfully cultivated before they are grown at the Gardens.
Photo: R. Hotchkiss, ANBG Collection

The Nursery

The nursery has been called the heart of the living collection. Most plants for the Gardens are propagated here.

Horticultural staff take three to four field trips every year. Cuttings, seeds or plants collected in the field add to particular parts of the collection such as the Rainforest Gully or Rock Garden. They also provide specimens for research and increase the number of threatened species brought into cultivation.

Frost sensitive plants are grown in the the Nursery glasshouses. These are opened to the public during special events.
Photo: R. Hotchkiss, ANBG Collection

Some 5000 new plants are grown each year to replace or add to parts of the living collection.

Young plants grow in special composted pine bark and sand mixtures which have been steam-sterilised to minimise the chance of fungal infection. Each species is identified through the herbarium and each plant is carefully labelled with a registration number matching the herbarium specimen, before being planted out in the Spring or Autumn.

Plants that need special climatic conditions to survive are kept in nursery glasshouses most of the year. These include warm-temperate and tropical rainforest palms and ferns. Other plants which are difficult to propagate, or which are unlikely to survive in the open ground, are kept in pots special storage bays.

Plant Labels

Horticultural staff do a health checkup and survey the location of all the plants in both Gardens each year. If necessary, labels are updated for scientific accuracy at the same time.

Collecting plants to grow at the Gardens can involve travel through difficult country, as in this trip to northern Queensland.
Photo: I. Telford, ANBG Collection

Plants in the Gardens are labelled with an up-to-date scientific name. The plant records staff also monitor the health of the collection.
Photo: R. Hotchkiss, ANBG Collection

Cuttings and seeds from the field trips are rushed to the nursery where the propagation skills of the staff come into play to minimise any loss. Eighty per cent of the plants grown in the Gardens are propagated from cuttings.

The Gardens and the Community

Banksias are a favourite source of nectar for the Red Wattlebird, *Anthochaera carunculata*.

Photo: K. Thaler, ANBG Collection

The Gardens and the Community

The Gardens' edueation programs aim to eneourage young people to appreeiate the beauty and diversity of Australian plants.
Photo: J. Foster, ANBG Collection

Almost half a million people from Australia and overseas visit the Canberra Gardens every year. They eome to learn and to enjoy. The Gardens plaees great emphasis on making one as aeeessible as the other.

Edueation

Thousands of students at all levels learn about plants at the Gardens eaeh year. The Gardens' Edueation Serviee also provides materials to visiting teaehers and others throughout Australia. Workshops on using the Gardens and exploring the faseinating world of Australian plants are eondueted for teaehers and the wider eommunity. Displays, publieations about plants and explanatory signs are also produeed as part of an effort to extend community knowledge of Australia's flora.

Visitor Information Centre and Bookshop

The Visitor Information Centre is usually the first port of eall on a visit to the Canberra Gardens. Exhibitions on speeial themes, leaflets on the gardens, information on native plants and a well-stoeked bookshop are all found here. The Publie Aeeess Herbarium is available for those who wish to identify plants from the ACT and NSW south eoast region.

Displays on themes related to the Australian environment are held at the Visitor Information Centre and ehanged from time to time.
Photo: R. Hotchkiss, ANBG Collection.

Opposite page
The beautiful surrounds of the Gardens provide an inspiration for people of all ages.
Photo: R. Hotchkiss, ANBG Collection

Left
The Gardens' Kiosk and surrounds are an exeellent venue for refreshments.
Photo: R. Hotchkiss, ANBG Collection

Right
The Banksia Centre eonduets therapeutie hortieulture programs for people with disabilities.
Photo. M. Fagg, ANBG Collection

The Kiosk

The Kiosk provides a popular luneh venue for Canberrans and out-of town visitors who appreeiate the exeellent food and even better surroundings.

The Banksia Centre

The Banksia Centre eonduets a popular and innovative therapeutie hortieulture program for older people and those with disabilities.

The Centre and its garden is designed to allow people to join in the experienee of growing plants. Some the garden seetions were planted by people with disabilities. The seetions inelude areas dedieated to eoloured, seented, textured and bird-attraeting Australian plants.

Raised beds in an outdoor gardening area allow people with disabilities to grow vegetables and flowers from standing, sitting or kneeling positions.

Speeial education programs have modified plant growing aetivities for students at both the primary and highsehool level.

The Banksia Centre also provides people with the opportunity to grow and eare for plants as an aid to physieal rehabilitation.

Young people with disabilities are given work opportunities to deeide whether hortieulture might be a voeation for them. Centre professionals also offer adviee and assistanee to people in the eommunity.

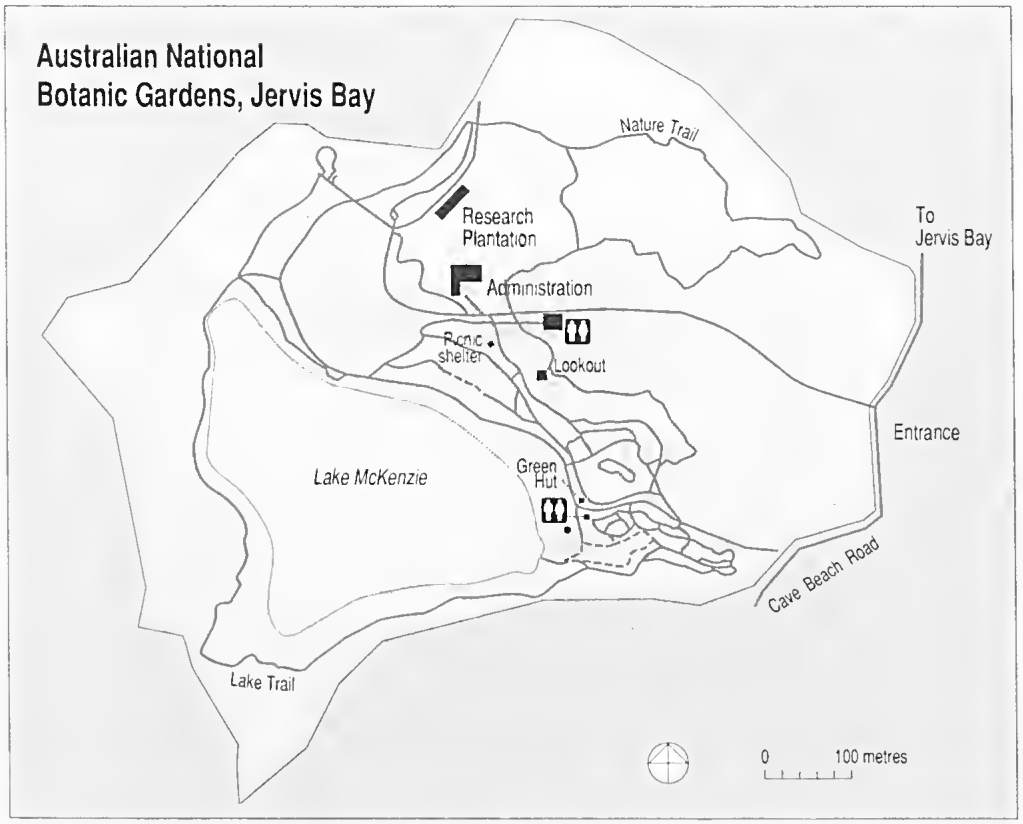
Raised beds make gardening more aeeessible for everybody.
Photo ANBG Collection

The Friends of the Gardens organise an aetive program of events, ineluding plant sales, for their members and the community.
Photo: M. Fagg, ANBG Collection

Friends and Volunteers.

The Friends of the Australian National Botanie Gardens provide an aetive support group. Members aim to inerease eommunity awareness of the seientifie, edueational, reereational and eonservation funetions of the Gardens. Many also give of their time as volunteer guides and to organise speeial events and plant sales.

Trained volunteer guides eseort thousands of visitors around the Gardens each year.
Photo: R. Hotchkiss, ANBG Collection


Australian National
Botanic Gardens, Jervis Bay
Nature Trail
Research Plantation
To Jervis Bay
Administration
Picnic shelter
Lookout
Entrance
Lake McKenzie
Green Hut
Cave Beach Road
Lake Trail
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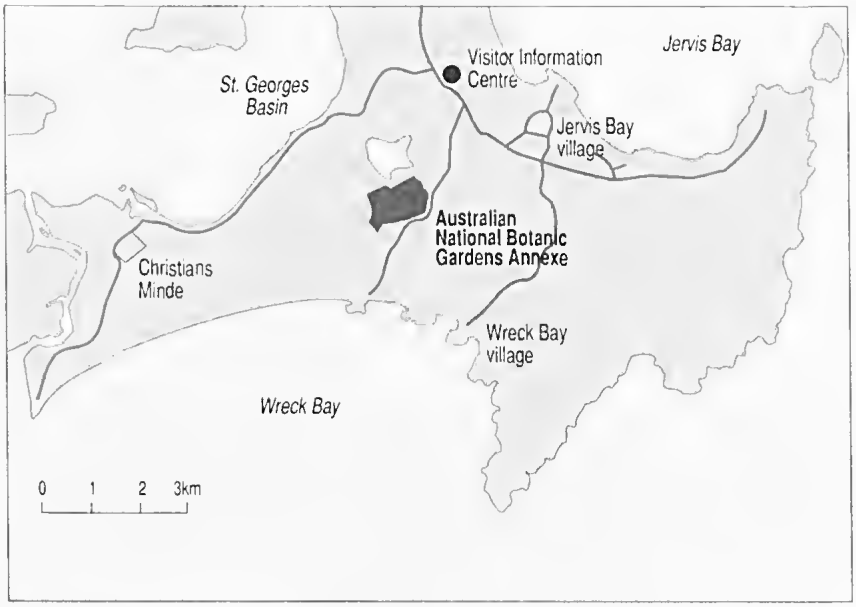
St. Georges Basin
Visitor Information Centre
Jervis Bay
Jervis Bay village
Australian National Botanic Gardens Annexe
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Wreck Bay village
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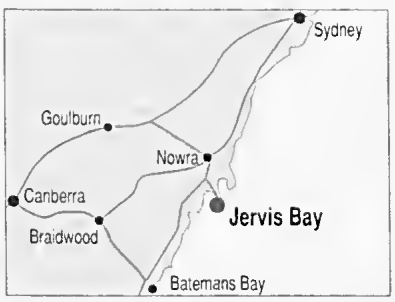
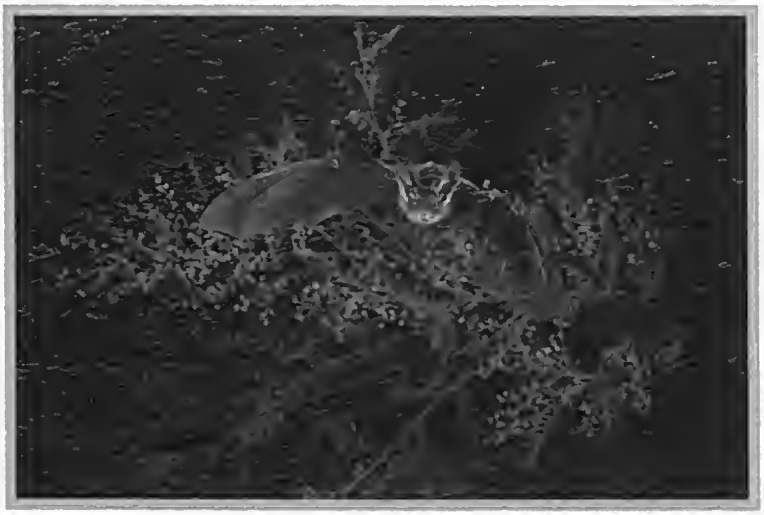

Sydney
Goulburn
Nowra
Canberra
Jervis Bay
Braidwood
Batemans Bay



During the early evening of the warmer months of the year Gould's Long-eared Bat, *Nyctophilus gouldi*, fly from their roosts to feed on insects. The bats hibernate during winter.

Photo: G. B. Baker, Wildlife Photography

Australian National Parks and Wildlife Service

Australian National Botanic Gardens